

1 What is claimed is:

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3 1. A construction system for erecting buildings, comprising walls (10, 20, 30,  
4 40, 60) that are configured from panel-type elements (11, 21, 31, 31', 41, 61, 70),  
5 wherein the panel-type elements (11, 21, 31, 31', 41, 61, 70) are manufactured  
6 from a material containing crushed vegetable-fiber material, in particular wood  
7 chips, and have recesses (12, 22, 32, 32', 42) for housing the pillars (13, 23, 33,  
8 43, 63, 71, 72) of a supporting construction.

9  
10 2. The construction system as recited in Claim 1,  
11 wherein the recesses (12, 22, 32, 32', 42) are formed in the surfaces of the  
12 panel-type elements (11, 21, 31, 31', 41, 61, 70).

13  
14 3. The construction system as recited in Claim 2,  
15 wherein the panel-type elements (11, 21, 31, 31', 41, 61, 70) include recesses  
16 (12, 22, 32, 32', 42) for pillars (13, 23, 33, 43, 63, 71, 72) on the inside and  
17 outside.

18  
19 4. The construction system as recited in Claim 3,  
20 wherein the recesses (42) are located on the inside and outside in an alternating  
21 pattern.

22  
23 5. The construction system as recited in one of the Claims 1 through 4,  
24 wherein the walls (20) are covered on the surfaces containing the recesses (22)  
25 for the pillars (23) by cover panels (24) made of the same or a different material  
26 as the panel-type elements (21).

27  
28 6. The construction system as recited in Claim 5,  
29 wherein the thickness of the cover panels (24) is equal to the distance between  
30 the base of the recesses (22) and the surface (21.1) of the panel-type elements  
31 (21) diametrically opposed to the recesses (22).

1 7. The construction system as recited in one of the Claims 1 through 4,  
2 wherein the walls (30) are configured from panel-type elements (31, 31') that are  
3 diametrically opposed in pairs, whereby the recesses (32, 32') of the panel-type  
4 elements (31, 31') for the pillars (33) are diametrically opposed and form a single  
5 cavity.

6  
7 8. The construction system as recited in one of the Claims 5 through 7,  
8 wherein an air gap (34) is located between the panel-type elements (21) and the  
9 cover panels (24) or between the diametrically opposed, panel-type elements  
10 (31, 31').

11  
12 9. The construction system as recited in one of the Claims 1 through 8,  
13 wherein the walls (10, 20, 30, 40) are provided with plaster or gypsum panels  
14 (44) on one or both sides.

15  
16 10. The construction system as recited in one of the Claims 1 through 9,  
17 wherein the pillars (13, 23, 33, 43, 63, 71, 72) are manufactured out of wood, in  
18 particular glued laminated wood.

19  
20 11. The construction system as recited in one of the Claims 1 through 9,  
21 wherein the pillars (13, 23, 33, 43, 63, 71, 72) are manufactured out of concrete,  
22 steel or a composite material.

23  
24 12. The construction system as recited in one of the Claims 1 through 11,  
25 wherein the walls (10, 20, 30, 40, 60) are composed of premanufactured wall  
26 elements or are capable of being assembled out of the same.

27  
28 13. The construction system as recited in Claim 12,  
29 wherein the wall elements include panel-type elements (11, 21, 31, 31', 41, 61),  
30 pillars (13, 23, 33, 43, 63), a threshold (65) and a top framework (64).

1 14. The construction system as recited in one of the Claims 12 or 13,  
2 wherein the wall elements (20) include cover panels (24) manufactured of the  
3 same material having the same or a different thickness as the panel-type  
4 elements (21).

5  
6 15. The construction system as recited in one of the Claims 12 through 14,  
7 wherein the wall elements (10, 20, 30, 40, 60) are covered with plaster or  
8 gypsum panels (44) on one or both sides.

9  
10 16. The construction system as recited in one of the Claims 12 through 15,  
11 wherein the wall elements (10, 20, 30, 40, 60) are provided with a plaster system  
12 on one or both sides.

13  
14 17. The construction system as recited in one of the Claims 12 through 16,  
15 wherein the wall elements (10, 20, 30, 40, 60) are provided with installation  
16 channels for accommodating water lines and electrical wiring.

17  
18 18. The construction system as recited in one of the Claims 12 through 17,  
19 wherein the pillars (71, 72) are joined with the panel-type elements (70) in a  
20 form-locked manner.

21  
22 19. A method for manufacturing prefabricated wall elements (10, 20, 30, 40,  
23 60) for a construction system as recited in one of the Claims 1 through 18,  
24 wherein the pillars (13, 23, 33, 43, 63, 71, 72) are inserted into and secured in  
25 recesses (12, 22, 32, 32', 42) in the panel-type elements (11, 21, 31, 31', 41, 61,  
26 71) provided for this purpose, and a top framework (64) and a threshold (65) are  
27 secured to the top and bottom edge of the panel-type elements (11, 21, 31, 31',  
28 41, 61).

29  
30 20. The method as recited in Claim 19,

1 wherein the recesses (12, 22, 32, 32', 42) for the pillars (13, 23, 33, 43, 63, 71,  
2 72) are formed in solid panels (50) manufactured out of crushed vegetable-fiber  
3 material.

4  
5 21. The method as recited in Claim 19 or 20,  
6 wherein cover panels (24) composed of the same material or a different material  
7 than the panel-type elements (21), and/or gypsum or plaster panels (44) are  
8 placed on the surfaces of the panel-type elements (11, 21, 31, 31', 41, 61) with  
9 recesses (12, 22, 32, 32', 42), and are secured to the pillars (13, 23, 33, 43, 63,  
10 71, 72), at the least.

11  
12 22. The method as recited in Claim 19 or 20,  
13 wherein pillars (33) that extend beyond the surface of the panel-type elements  
14 (31) are inserted in the recesses (32), then a second panel-type element (31')  
15 with recesses (32') is installed in such a manner that the pillars (33) are  
16 accommodated by the recesses (32') in the second panel-type element (31').

17  
18 23. The method as recited in Claim 21 or 22,  
19 wherein the cover panels (24) or the second panel-type elements (31') are  
20 placed on the panel-type elements (21, 31), and an air gap (34) is formed.

21  
22 24. The method as recited in one of the Claims 21 through 23,  
23 wherein, after the cover panels (24), gypsum or plaster panels (44), or the  
24 second panel-type elements (31') are installed, they are nailed to the pillars (13,  
25 23, 33, 43, 63), and the top framework (64) and threshold (65) are installed and  
26 nailed to the pillars (13, 23, 33, 43, 63) and panel-type elements (11, 21, 31, 41,  
27 61) before the wall element (10, 20, 30, 40, 60) is turned and the first panel-type  
28 element (21, 31, 61) is nailed to the pillars (23, 33, 63) from the outside.

29  
30 25. The method as recited in one of the Claims 19 through 24,

wherein the panel-type elements (11, 21, 31, 31', 41) and/or the cover panels (24) are composed of shaped blocks as prefabricated elements.

26. The method as recited in one of the Claims 19 through 25, wherein the recesses (12, 22, 32, 32', 42) are lined and then filled with concrete.

27. The method as recited in one of the Claims 19 through 26, wherein panels made of drywall material (44) or plaster systems are installed on one or both sides of the wall elements (10, 20, 30, 40).